

**ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION**

**ALLOTMENT 62043**

Township 7 North, Range 16 & 17 East  
Various Sections  
NMPM, Guadalupe County

**EA-NM-060-01-045**

**November, 2000**

**U.S. Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
Roswell, New Mexico**

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1. Introduction

A. Purpose and Need for the Proposed Action

The grazing regulations (43 Code of Federal Regulations 4110) allow for a ten-year permit to be issued for grazing inside the grazing district boundary and ten year leases on allotments outside the grazing district boundary. The Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS) (October 1997) states a livestock grazing management goal of providing effective and efficient management of allotments to maintain, improve and monitor range conditions. A site specific analysis of the impacts of issuing a grazing lease to the applicant, Robert May, is needed for compliance with the National Environmental Policy Act (NEPA) and to make an informed decision.

This document will analyze the site specifics of authorizing the issuance of the lease on Allotment 62043 (Berlier Place), other future actions such as range improvement projects will be addressed in a project specific environmental assessment. There are no current plans for additional management actions on this allotment. This allotment is within the Grassland community, Mixed Desert Shrub community and the Drainages, Draws and Canyons community as identified in the Roswell RMP/EIS. Vegetative communities managed by the Roswell Field Office are identified and explained in the RMP/EIS. Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community.

B. Conformance with Land Use Planning

The Roswell RMP/EIS has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision. The Roswell RMP/EIS states a livestock grazing management goal of providing effective and efficient management of the allotment to maintain, improve and monitor range conditions. The proposed action is consistent with the RMP/EIS.

### C. Relationships to Statutes, Regulations, or Other Plans

The proposed action is consistent with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (TGA) (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1535 et seq.) as amended; and the Public Rangeland Improvement Act of 1978 (PRIA) (43 U.S.C. 1901 et seq.)

## II. Proposed Action and Alternatives

### A. Proposed Action

The proposed action is to authorize a grazing lease on Allotment 62043 (Berlier Place) for 2 Animal Units (AUs) year long at 100 percent public land for 25 Animal Unit Months (AUMs). The permit would be offered to Robert May.

### B. No Authorization Alternative

This alternative, if selected, would be to not issue a grazing lease for Allotment 62043. No grazing would be authorized on the federal land within the allotment.

## III. Affected Environment

### A. General Setting

Allotment 62043 is located in Guadalupe County, lying north of US 84 and 3 miles east of the Guadalupe County line, New Mexico. The allotment is watered by several wells, an extensive water pipeline system and dirt tanks. The allotment consists of 120 acres of public land and approximately 9,018 acres of private land. (See attached map).

Allotment 62043 (Berlier Place) lies outside the Roswell Grazing District Boundary, established subsequent to the Taylor Grazing Act (TGA), and is administered under Section 15 of the TGA. The permitted use on this Section 15 lease is established by the amount of forage produced on the public lands due to the relatively small amount of public land in relation to the large amount of private holdings. During the late 1930's and 40's the Bureau of Land Management (BLM) and the allottee at that time agreed to the number of stock the ranch could run. Since then, BLM Roswell has been very involved in vegetation monitoring and range evaluations. Using these data adjustments to stocking rates and total numbers has been made on allotments throughout the resource area.

The area of Allotment 62043 consists of rolling grass covered hills, with a mixed desert shrub aspect. The average elevation ranges from 4400 to 4600 feet above

sea level. Grass species make up 97 percent of the production in the existing plant community. The 1999/00 recorded precipitation for the area was 17.62 inches (recorded in Santa Rosa, NM). Most of the annual precipitation falls during high intensity, short duration thunderstorms occurring from May to October.

The following resources or values have been evaluated and are either not present or are not affected by the proposed action or alternatives in the EA: Prime/Unique Farmlands, Cultural Resources, Native American Religious Concerns, Invasive, Non-Native Species, Floodplains, Riparian Areas, Wild and Scenic Rivers, Hazardous Wastes, and Areas of Critical Environmental Concern. The impact of the proposed action and alternative to minority or low-income populations or communities has been considered and no significant impact is anticipated.

## B. Affected Resources

### 1. Soils

The soils present on the public lands within Allotment #62043 are the Clovis Fine Sandy Loam (0 to 3 percent slope), the Travessilla-Rock Outcrop Complex (30 to 75 percent slope) and the La Fonda - Palma Fine Sandy Loams (5 to 15 percent slopes).

The Clovis Fine Sandy Loam is found on hills and swales. The Clovis soil is very deep and is formed in alluvial and eolian materials derived from sandstone, shale and limestone. It is well drained, with moderate permeability. Runoff is slow. The hazard of erosion from water is slight, while the hazard of exposed soil blowing is severe.

The Travessilla-Rock Outcrop Complex is found on escarpments and dissected drainages. Slopes are 30 to 75 percent. The Travessilla soil is shallow and formed in alluvial and eolian materials derived from sandstone and shale, and is predominately found on ledges and escarpments. It is well drained with moderately rapid permeability. Runoff is high and hazard of water erosion or soil blowing is severe. The Rock Outcrop consists of barren and nearly barren areas of shale, sandstone and limestone and is found on vertical rock faces and cliff edges.

The La Fonda - Palma Fine Sandy Loams are found on the hills below the mesas, with slopes of 5 to 15 percent. The La Fonda soils are very deep and are formed in alluvial and eolian materials derived from sandstone, shale and limestone. The La Fonda soils are found on the ridges adjacent to mesa escarpments. They are well drained with moderate permeability. The Palma soils are also very deep and formed in alluvial and eolian materials derived from sandstone and limestone. These soils are usually found on the lower foot slopes and toe slopes. They are well drained with moderately rapid permeability. In both soils runoff is medium, and the hazard of erosion by water is moderate while the hazard of exposed soil blowing is severe.

More information on these soils can be found in the Soil Survey of Guadalupe County Area, New Mexico.

## 2. Vegetation

The vegetation on the public land within Allotment #62043 fits one major range site: Loamy CP-3. In the Loamy CP-3 Range site blue grama, galleta, tobosa, sideoats grama and black grama are the most abundant grasses, while sand dropseed, hairy grama, muhlenbergia species and threeawn are also found. Shrubs such as fourwing saltbush, winterfat and mormontea are also found on this range site. Forbs which may occur in this area are buckwheat and globemallow. The forb component in all of the range sites varies from year to year, dependent upon the amount and timing of precipitation.

## 3. Wildlife

The area provides habitat for small animals, birds, rodents, and a sustainable population of pronghorn antelope and mule deer.

## 4. Threatened and Endangered Species

There are no known threatened or endangered species of plant or animals on Allotment 62043. A list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2). There are no designated critical habitat areas within this allotment. The swift fox is a Federal Candidate species that may occupy or utilize the area; refer to the Biological Opinion (AP11-38) in the Roswell RMP for a detailed description of the range, habitats and potential threats.

A bird, the mountain plover, has been recently proposed for listing as an Endangered Species. It is associated with shortgrass and shrub-steep landscapes throughout its breeding and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns and in areas of major bison concentration. The mountain plover are considered to be strongly associated with sites of heaviest grazing pressure, to the point of excessive surface disturbance. Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales.

The black-tailed prairie dog has also become a Federal Candidate species recently. It is also associated with shortgrass and midgrass prairies and grass-shrub habitats. Formerly, they were widespread and abundant east of the Rio Grande and in the grasslands of southwestern New Mexico. Colonies were reported in marginal habitat, such as open woodland, and in the southwestern part of the state they occupied semidesert conditions. They have also been reported in former shinnery savannahs which have been converted to shortgrass-like habitat. The species is herbivorous, apparently preferring various species of grasses over other available vegetation in their desert grassland habitat. They eat a wide variety of grasses, weeds, and shrubs, feeding on the stem, leaves, and seeds. These provide

moisture as well as food. Grasses are clipped close to the ground to allow for a greater range of sight and the digging actions contribute to enhancing soil composition and forb growth. Roots are dug when this food supply is required. Food items are apparently not stored below ground. The black-tailed prairie dog lives in colonies or towns, which cover from one acres to tens-of-thousands of acres. They remain active all year long, but during extremely cold weather events will remain underground for several consecutive days. They dig extensive, deep and permanent burrows with a dome-shaped mound at the entrance. Nest cavities are in the deeper parts of the burrows. No prairie dog towns are known to exist on this allotment.

#### 5. Livestock Management

The allotment is grazed by cattle, using a cow-calf operation. The latest grazing lease on Allotment 62043 (Berlier Place) was for 2 Cows. The livestock are rotated in and out of the pasture containing the public land, and are moved to other locations which are all private. The pasture is given a growing season rest, from July to September, approximately every three years. When conditions are dry, the stocking rate across the ranch is reduced, by removal of some to all of the livestock.

#### 6. Visual Resources

Allotment 62043 are located in Class IV Visual Resource Management (VRM) Area. In the Class IV area contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

#### 7. Water Quality

Domestic water wells, and dirt tanks are the surface water on the ranch, none of which are located on public land. The amount of water and period of retention in the dirt tanks is dependent on the weather conditions. Ground water is pumped from the drilled domestic wells. The quality of the well water is adequate for livestock and wildlife use.

#### 8. Floodplains

Within this allotment no floodplains exist that are recorded on Federal Emergency Management Agency maps. The draws contained within the ranch include Leoncito Draw, it is located over 2 miles from the public lands. It is considered to be a dry arroyo.

#### 9. Air Quality

Air quality is good. The area is in a Class II area for the prevention of significant deterioration of air, as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

#### 10. Recreation, Caves and Karst

Recreation: Dispersed recreational opportunities exist in Allotment 62043 as access to the public land is extremely limited. Dispersed recreational activities include hunting, caving, sightseeing, bird watching, primitive camping, mountain biking, horseback riding and hiking. Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails. The public lands in this allotment can be accessed by foot (hiking, or walking) or by two-track roads.

Caves and Karst: Allotment 62043 is located within designated areas of Low Karst and Cave Potential.

Although a complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment, no known significant cave or karst features are known to exist within this allotment.

### IV. Environmental Impacts

#### A. Impacts of the Proposed Action

##### 1. Soils

The soils will be influenced by livestock grazing directly by compaction, trailing that may break through the turf, chipping of soil surface caused by hoof action, and recycling of nutrients. Infiltration rates are increased by chipping of soil surface over most of the area but will be decreased by compaction around watering, trailing, and bedding areas. The area of compaction would be relatively small. Livestock remove vegetation that would have reduced the erosive forces of wind, rain and surface runoff. Proper utilization levels and grazing distribution patterns under the present operation retain sufficient vegetative cover so as to maintain the stability of the soils. The level of grazing identified in the proposed action would continue to maintain an adequate ground cover for protection and the development of the soils. The percentage of bare ground and rock found on the public land within the allotment fall within the parameters established by the RMP/EIS for these vegetative communities.

##### 2. Vegetation

There is one vegetative study on this allotment, established in 1991. Ecological condition as shown by the data collected indicate the vegetation is sustainable at the proposed amount of grazing by livestock. The most recent data show the ecological condition for the area evaluated to be in good condition. Vegetation studies indicate that the diversity and amount of vegetation present meets the multiple resource requirements and will support the number of livestock proposed for this allotment. Copies of the monitoring data and the analysis of the data are available at the Roswell Field Office.

### 3. Wildlife

Domestic livestock will continue to utilize vegetative resources needed by a variety of wildlife species for life history functions within this allotment. The magnitude of livestock grazing impacts on wildlife is dependent upon the species of wildlife being considered, and its habitat needs. In general, livestock stocking rate adjustments have been made in the past to minimize the direct competition for those vegetative resources needed by a variety of wildlife species. Cover habitat for wildlife will remain the same as the existing situation. Maintenance and operation of existing waterings will continue to provide dependable water sources for wildlife, as well as livestock

### 4. Threatened and Endangered Species

Surveys have been conducted in New Mexico for the mountain plover by Lawry Sager in 1995, for the New Mexico Department of Game and Fish (Sager, 1996).

No known breeding populations or wintering locales were found in the Roswell Field Office area. In addition, mountain plover surveys were conducted in 1998 at BLM selected sites by New Mexico Natural Heritage Program (DeLay & Johnson, 1998). No mountain plovers were observed at the sites. As mountain plovers prefer short vegetation and actually seek out grazed pastures, the cumulative impacts from grazing are not anticipated to adversely affect the bird. Grazing practices which maintain or improve ground cover to the greatest extent possible could decrease mountain plover habitat. The preferred alternative will continue to emphasize proper watershed management, but is unlikely to adversely affect this species or its habitat in the mixed desert shrub area. Since no known wintering locales or breeding sites have been found and no known prairie dog towns are located within this allotment, proper grazing management is not likely to jeopardize, destroy or adversely modify the habitat for the mountain plover or the black-tailed prairie dog..

### 5. Livestock Management

The proposed action would allow the existing livestock management to continue. The existing management is not causing any adverse impacts to the environment. The distribution and supply of livestock water is available for wildlife. Livestock under rotation grazing will continue to maintain or increase ground cover by stimulating growth of vegetation and by scattering litter which protects the soil from wind and water erosion.



#### 6. Visual Resources

Visual resources will be managed to meet the Visual Resource Management class.

All proposed management activities will be evaluated with regard to visual resource management and those project that are compatible with the character of the natural landscape will be encouraged. No management actions should be proposed that would degrade visual quality to the extent that a change in any VRM class will result. The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

#### 7. Water Quality

Livestock grazing will not have a significant influence on water quality. The ground water is not affected by livestock grazing.

#### 8. Air Quality

The proposed action will not have an effect on the air quality. The air quality will remain virtually the same as present.

#### 9. Recreation, Caves and Karst

Grazing should have little or no impact on the dispersed recreational opportunities within Allotment 62043, since the recreational use of these public lands have low potential. The evidence or presence of livestock can negatively affect visitors who desire solitude, unspoiled landscape views or hike without seeing signs of livestock. However, grazing can benefit some forms or recreation, such as hunting, by creating new water sources for game animals.

If monitoring determines that significant caves or karst features are found and are being affected by grazing, additional protective measures will be required. The protective measures could include, but are not limited to, the following actions: Fencing sinks, cave entrances or arroyos from multiple-use impacts; removing check-dams, erosion control projects and stock ponds; closing roads; no chemical vegetation removal. The area around significant caves or karst features should be treated sensitively, so no adverse impacts affect the cave or karst feature.

### B. Impacts of the No Livestock Grazing Alternative

#### 1. Soils

The soil will not be subjected to compaction, chipping or standing vegetation reduction that is associated with livestock grazing. The stability and development of the soil would be about the same as with grazing. Soil compaction would be reduced on the allotment around drinking troughs and along trails.

## 2. Vegetation

There would be small change in the types and amounts of vegetation found within the allotment. It is expected that the number of plant species found within the allotment will remain the same. Vegetation will continue to be utilized by wildlife but the removal of the standing vegetation by livestock would be absent.

## 3. Wildlife

There would be no competition between livestock and wildlife for forage or cover.

## 4. Threatened and Endangered Species

There would be no change in the mountain plover or black-tailed prairie dog habitat if the No Grazing alternative was selected.

## 5. Livestock Management

Under the No Grazing alternative there would be no grazing on the federal land in the area of Allotment 62043. This would have an adverse economic impact to the livestock operation. If the No Grazing alternative is selected, the owner of the livestock would be responsible for ensuring that livestock do not enter Public Land [43 CFR 4140.1(b)(1)]. The intermingled land status on the allotment makes it economically unfeasible to fence out the public land and use only the private land. Excluding these tracts by fencing would actually cause more surface damage.

## 6. Visual Resources

No change in the visual resources, scale, land-form, and color will occur with the No Grazing alternative, exclusive of the new fencing.

## 7. Water Quality

A change in surface water quality may occur with the No Grazing alternative. This is anticipated because the removal of standing vegetation will not be occurring to the degree allowed in the proposed action. More standing vegetation will slow storm runoff, which will reduce sedimentation movement on the public land. Ground water would not be affected by choosing the no grazing alternative.

## 8. Air Quality

There would be no change to the air quality with the No Grazing alternative.

## 9. Recreation, Caves and Karst.

This alternative would have no effect on recreation, caves or karst features.

## 22. Cumulative Impacts

A cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

The analysis of cumulative impacts is driven by major resource issues. The action considered in this environmental assessment (EA) is the authorization of livestock grazing on Allotment #62043.

The incremental impact of issuing a grazing permit on these resources must be analyzed in the contexts of impacts from other actions. Other BLM actions that could have impacts on the identified resources include: livestock authorization on other allotments within the same plant community; oil and gas activities, rights-of-way and recreation use.

All authorized activities which occur on public land can also take place on state and private lands. Many of the actions which could contribute to cumulative impacts have occurred over many years. For example, impacts from open-range livestock grazing in the last century are still being addressed today. Other activities, such as oil and gas activities, and recreation uses, are still occurring today, and are expected to continue into the foreseeable future to some degree.

The Proposed Action would not add incrementally to the cumulative impacts to threatened and endangered species. The conclusion that impacts to these resources from grazing authorization would not be significant are discussed in detail in Section III of the EA. All of the allotments that have permits or leases with BLM will have to go through scoping and analysis under NEPA. Allotment #62043 is surrounded by allotments that have or will be undergoing this process. If the proposed action is selected, there would be no change in the cumulative impacts since it does not vary from the current situation.

If the No-Grazing Alternative were chosen for this allotment, some cumulative impacts from grazing would be eliminated, but others would occur. Grazing would no longer be available as a vegetation management tool, and public lands within the allotment would be less intensively managed. For example, control of noxious plant species would be less likely without allotment management. If the No Livestock Grazing alternative is selected, there would be little change in the overall cumulative impact as long as the surrounding allotments continue to be stocked at their current level. If the permitted numbers are reduced or eliminated on the surrounding ranches as well, the economics of the surrounding communities and or minority/low income populations would be negatively impacted.

Cumulative impacts of the grazing and no grazing alternatives were also considered in Chapter 4 of Rangeland Reform >94 Draft Environmental Impact Statement and in

Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

#### VI. Residual Impacts

The area has been grazed by livestock since the early part of the 1900's, if not longer. Recent vegetative monitoring studies have shown that grazing, at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action.

#### VII. Mitigating Measures

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

#### VIII. Conformance With Standards and Guidelines for Rangeland Health, New Mexico

The condition of the public lands within this livestock grazing allotment has been reviewed for conformance with the Standards for Public Land Health and Guidelines for Livestock Grazing Management. Currently, the condition of the public lands and the management of livestock grazing conform to the Standards and Guidelines.

The parameters for measuring public land health, however, have yet to be developed for Standards and Guidelines. When these parameters are delineated, the Roswell Field Office will again review the public land health in this allotment and will document its findings in conformance with the National Environmental Policy Act. The document would include analysis of any changes from the Proposed Action.

### Literature Citations

DeLay, L. and K. Johnson. 1998. Mountain plover survey on Bureau of Land Management Lands,

Roswell Field Office, NM, 1998. New Mexico Natural Heritage Program. 22 pp.

New Mexico Water Quality Control Commission. 1998. Water quality and water pollution control in New Mexico, 1998. NMED/SWQ-98/4.

New Mexico Water Quality Control Commission. 1995 State of New Mexico standards for interstate

and intrastate streams. 20 NMAC 6.1. 51 pp.

Sager, L 1996. A 1995 survey of mountain plovers in New Mexico. New Mexico Department of Game and Fish. Contract 95-516-66. 59 pp

## FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the proposed action will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rational for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The proposed action will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

/s/ t R Kreager

9/5/01

T. R. Kreager,  
Assistant Field Office Manager - Resources

Date

## DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing lease of public lands on the Robert May, Berlier Place, Allotment #62043. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c))

/s/ T R Kreager

T. R. Kreager,  
Assistant Field Office Manager - Resources

11/20/02

Date

